CULTURAL RESOURCES SURVEY OF THE LATTA-DILLION 69kV TRANSMISSION PROJECT, DILLON COUNTY, SOUTH CAROLINA

Chicora Research Contribution 591

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MANAGEMENT SUMMARY

This report provides the results of a cultural resources investigation of a 5.42-mile transmission line situated in north central Dillon County. Andrew Hyder conducted the study, under the supervision of Dr. Michael Trinkley of Chicora Foundation for Mr. Tommy Jackson of Central Electric Power Cooperative. The work is intended to assist this client comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The corridor is to be used by Central Electric Power Cooperative for the construction of the 69kV transmission line. The proposed corridor will start at an existing Dillion substation east of U.S. Highway 301 and travel south to the existing Latta substation site on the east side of South Carolina Highway 37.

The proposed route will require the clearing of the corridor (although much is already in cultivated fields), followed by construction of the proposed transmission line. These activities have the potential to affect archaeological and historical sites that may be in the project corridor. For this study, an area of potential effects (APE) 50 feet around the proposed transmission line was assumed.

Dillon County has received a comprehensive architectural survey (Wagoner et al. 2011), coupled with a variety of additional investigations. In spite of the previous work, no architectural sites have been identified within the APE. ArchSite, however, reveals that the corridor traverses the Bethea Rural Historic District, consisting of eight structures, although the "character is based on its rural nature (Wagoner et al. 2011:52).

An investigation of the archaeological site files at the S.C. Institute of Archaeology and Anthropology failed to identify any archaeological sites in the survey corridor or the APE.

The archaeological study of the transmission line incorporated shovel testing at 100-foot intervals along the centerline of the 70-foot wide proposed corridor, which had been cut and staked at the time of this investigation. All shovel test fill was screened through ¼-inch mesh and the shovel tests were backfilled at the completion of the study. A total of 286 shovel tests were anticipated in the corridor. Because of extensive wetland areas with standing water, only 181 were actually excavated in the survey corridor.

One previously recorded archaeological site, 38DN129, is outside the 50-foot APE, but about 100 feet from the corridor. Nevertheless, this site was previously recommended not eligible for inclusion on the National Register. No archaeological sites were found in the proposed transmission line corridor.

The Bethea Historic District located at the northern portion of the project area will not be affected by construction activities. We do not believe that wood pole transmission lines will affect the rural character because such lines already exist (along with a substation) and because electrification is a major rural theme in South Carolina history.

It is possible that archaeological remains will be encountered in the project area during construction. Construction crews should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office or to Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No construction should take place in the vicinity of

these late discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

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Introduction

This investigation was directed by Dr. Michael Trinkley of Chicora Foundation, Inc. for Mr. Tommy L. Jackson of Central Electric Power Cooperative. The work was conducted to assist Central Electric Power Cooperative to comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The proposed line begins at the existing Latta substation and runs about 350 feet northwest

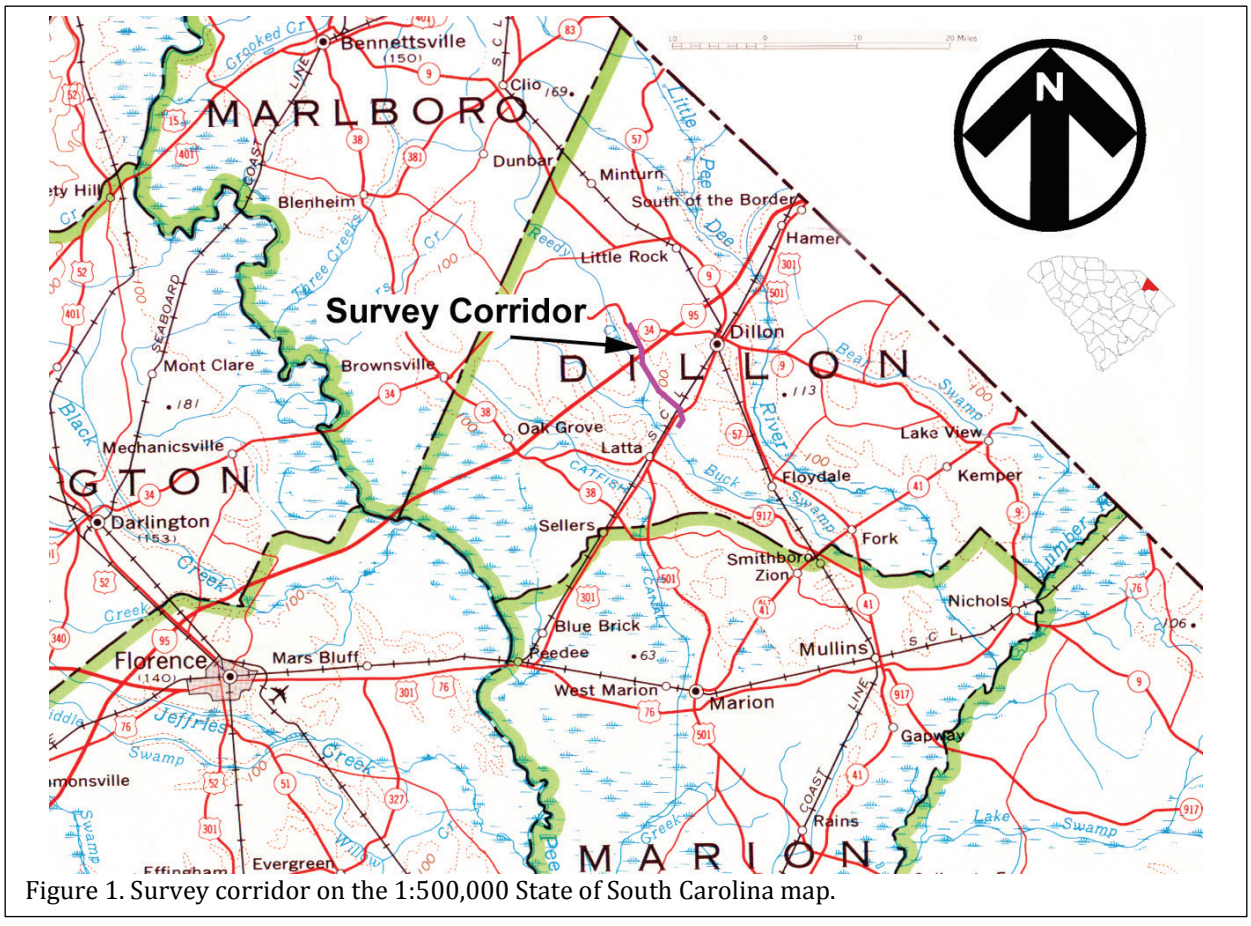


Figure 1. Survey corridor on the 1:500,000 State of South Carolina map.

The project site consists of a 5.42-mile corridor to be used for a transmission line in central Dillon County, between the Latta and Dillon substations (Figure 1). The proposed corridor will

before turning to the northeast and continuing for about 1,900 feet. It then turns north-northeast and continues for an additional 2,300 feet, crossing U.S. 301 and a CSX railroad line. It continues 6,700 feet

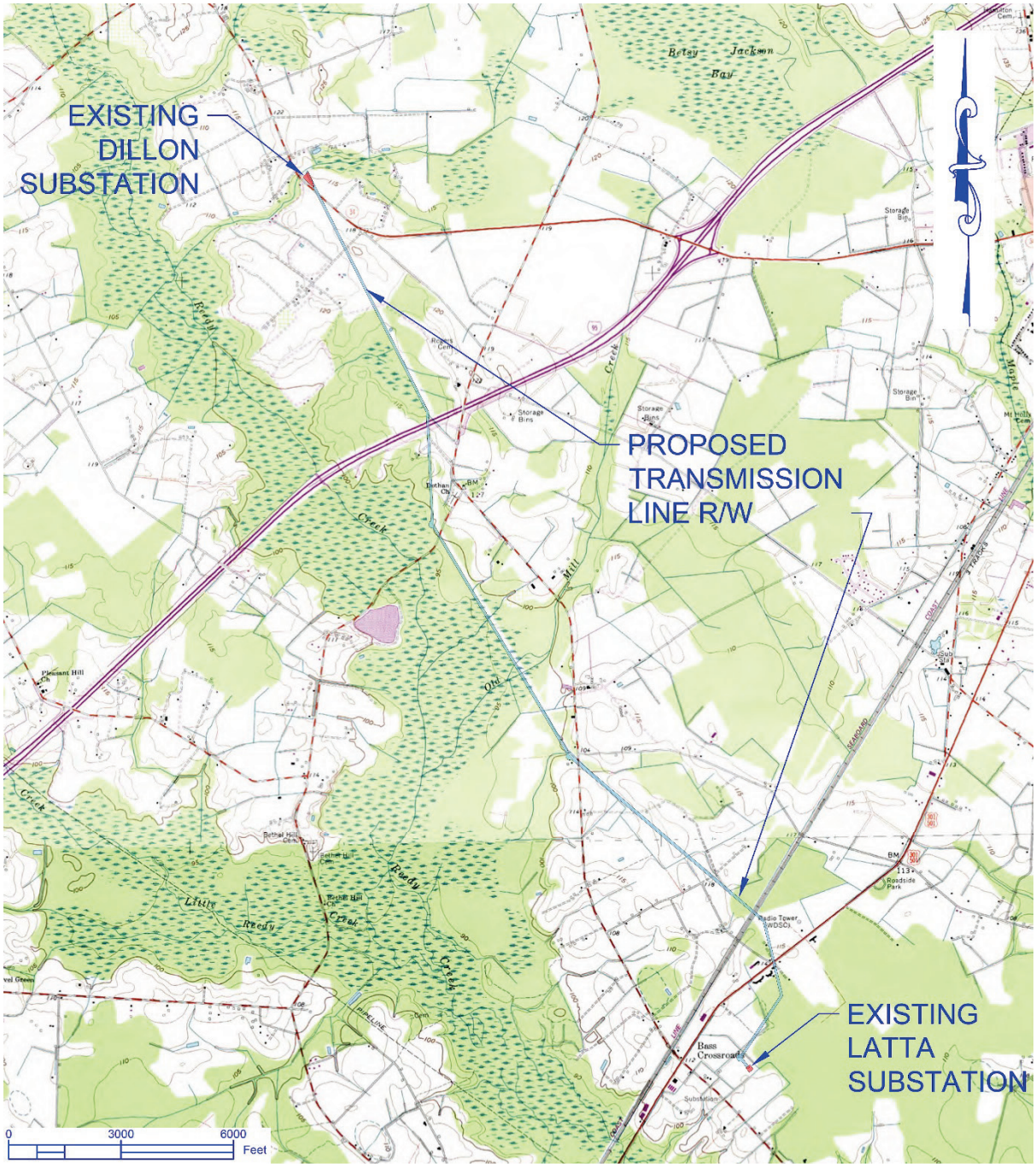


Figure 2. Portion of the 1:24,000 USGS Dillon West 1960PR1980 and Latta 1960PR80 topographical maps showing project corridor and the terminal substations at the northern and southern ends.

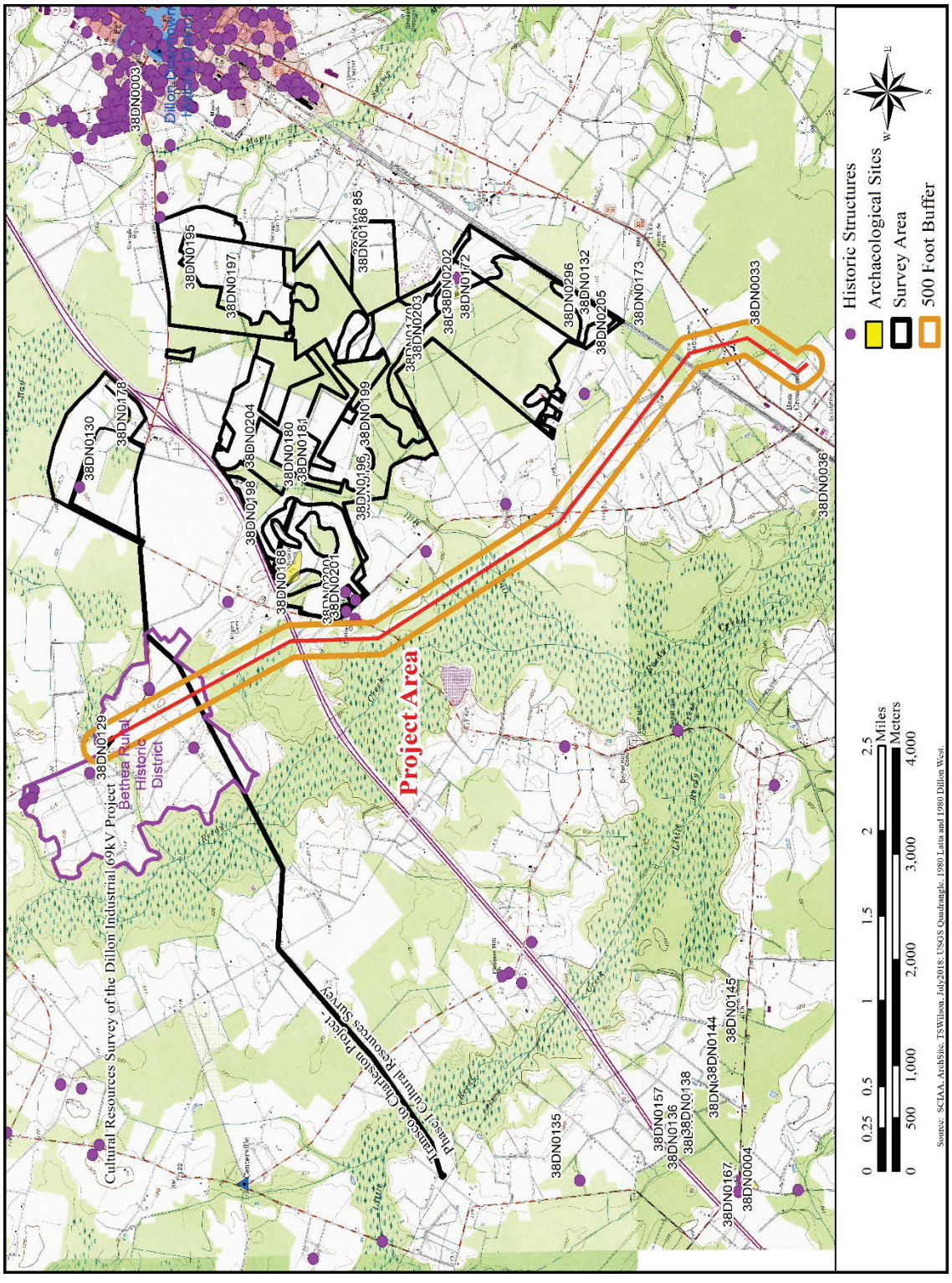


Figure 3. ArchSite map showing archaeological sites and standing architecture reported for the project area. The blue lines denote an area of 500 feet on either side of the centerline. The APE is actually 50 feet.

to the northwest crossing Dothan Road, just west of the Dothan and West Countryside Road intersection. It then runs 7,200 feet to the northwest, crossing Bethel Road and turning almost due north and continuing for about 3,000 feet, crossing I-95. It continues about an additional mile, running northwest, and terminating at the existing Marlboro Electric Cooperative Dillon Substation. This proposed line parallels an existing South Carolina Public Service Authority overhead line on a 100-foot corridor (Figure 2).

The corridor exhibits very little topographic variation, with elevations ranging between about 97 and 115 feet above mean sea level (AMSL). The proposed line will come out of agricultural fields and enter low swampy land at the southern portion of the corridor.

Most of the corridor has been converted to agricultural fields, although there is remnant lowland vegetation along southern portions of eh project area. The more poorly drained areas are heavily vegetated, primarily with scrub and noxious vines. A portion of the northern corridor passes through planted pines where agricultural fields were once located.

The proposed corridor, as previously mentioned, is intended to be used as a transmission line. Landscape alteration, primarily clearing and construction, including erection of poles, will damage the ground surface and any archaeological resources that may be present in the survey area. Construction and maintenance of the transmission line may also have an impact on historic resources in the project area.

The project will not directly affect any standing historic structures (since none are located on or within 50 feet of the survey corridor), but the completed facility may detract from the visual integrity of historic properties, creating what some consider discordant surroundings. As a result, this architectural survey uses an area of potential effect (APE) 50 feet around the proposed corridor. This distance was selected since the proposed corridor will use only single poles or H-frame wood poles, the corridor is primarily 70 feet in width, tree cover in some areas is heavy, there are numerous transmission lines already present, and the area has been modified by cultivation.

This study, however, does not consider any future secondary impact of the project, including increased or expanded development of this portion of Dillon County.

We were requested by Mr. Tommy L. Jackson of Central Electric Power Cooperative to conduct the cultural resource study in June 2018, with the field investigations conducted by Andrew Hyder, under the supervision of Dr. Michael Trinkley from August 18th through August 22nd, 2018. The architectural survey and evaluations were conducted by Dr. Trinkley at this same time.

These investigations incorporated a review of ArchSite and the site files at the South Carolina Institute of Archaeology and Anthropology using an Area of Potential Effects (APE) of 100 feet. No previously identified archaeological sites were identified in the corridor, in the 50-foot APE, or even the 500-foot search area shown in purple on Figure 3.

A comprehensive architectural survey of Dillon County has been conducted (Wagoner et al. 2011). The corridor does pass through the recently created Bethea Rural Historic District. However, as the proposed line parallels an existing line and given the significance of rural electrification as a theme in South Carolina, we do not believe the proposed activity will have any impact on the district.

One previously recorded archaeological site, 38DN129, is on the periphery of the 500 feet buffer of the Dillion substation, but not within the 50 foot APE. This site was recommended ineligible when originally identified (Trinkley and Southerland 2009), an assessment concurred with by the State Historic Preservation Office at the time.

No additional archaeological sites were

identified during these investigations.

Archival and historical research was limited to a review of secondary sources available in the Chicora Foundation files and at the South Caroliniana Library.

The architectural survey of the APE, designed to identify any structures over 50 years in age that retain their integrity and that are potentially eligible for the National Register of Historic Places revealed no such structures in the corridor.

Report production was conducted at Chicora's laboratories in Columbia, South Carolina on September 7-8, 2018. The only photographic materials associated with this project are digital and will be retained by Chicora Foundation. All other field notes and the resulting collections will be curated at the South Carolina Institute of Archaeology and Anthropology.

Environmental Background

Physiography

Dillon County is situated in the Inner Coastal Plain of South Carolina and is bounded on the southwest by the Great Pee Dee River, on the south by Marion and Florence counties, on the southeast by the Lumber River, on the northeast by North Carolina, and on the west by Marlboro County. The land primarily consists of gently rolling hills with elevations ranging from about 42 feet above mean sea level (AMSL) in parts of the river floodplains to a high of about 170 feet AMSL in the northern part of the county (Dudley 1978:1).

The Great Pee Dee River and the Lumber River flow past the county on the southwest and southeast edges. Their main tributaries include Pocosins Swamp, Gum Swamp, and Beaverdam Creek. The Little Pee Dee River flows through the center of the county. The Little Reedy Creek flows from northwest to southeast to the west of the project area. Old Mill Creek parallels much of the corridor to the east.

The study area is situated in the central portion of Dillon County. Where the corridor is found in the upland agricultural fields (or planted pines), elevations range from about 110 to 120 feet AMSL. As the corridor approaches the lowlands of Reedy Creek or crosses Old Mill Creek, elevations drop to below 100 feet AMSL,

The agricultural fields tend to be relatively flat and most of them exhibit some sort of artificial drainage, typically ditches channeling water back to either Reedy or Old Mill creeks.

Geology and Soils

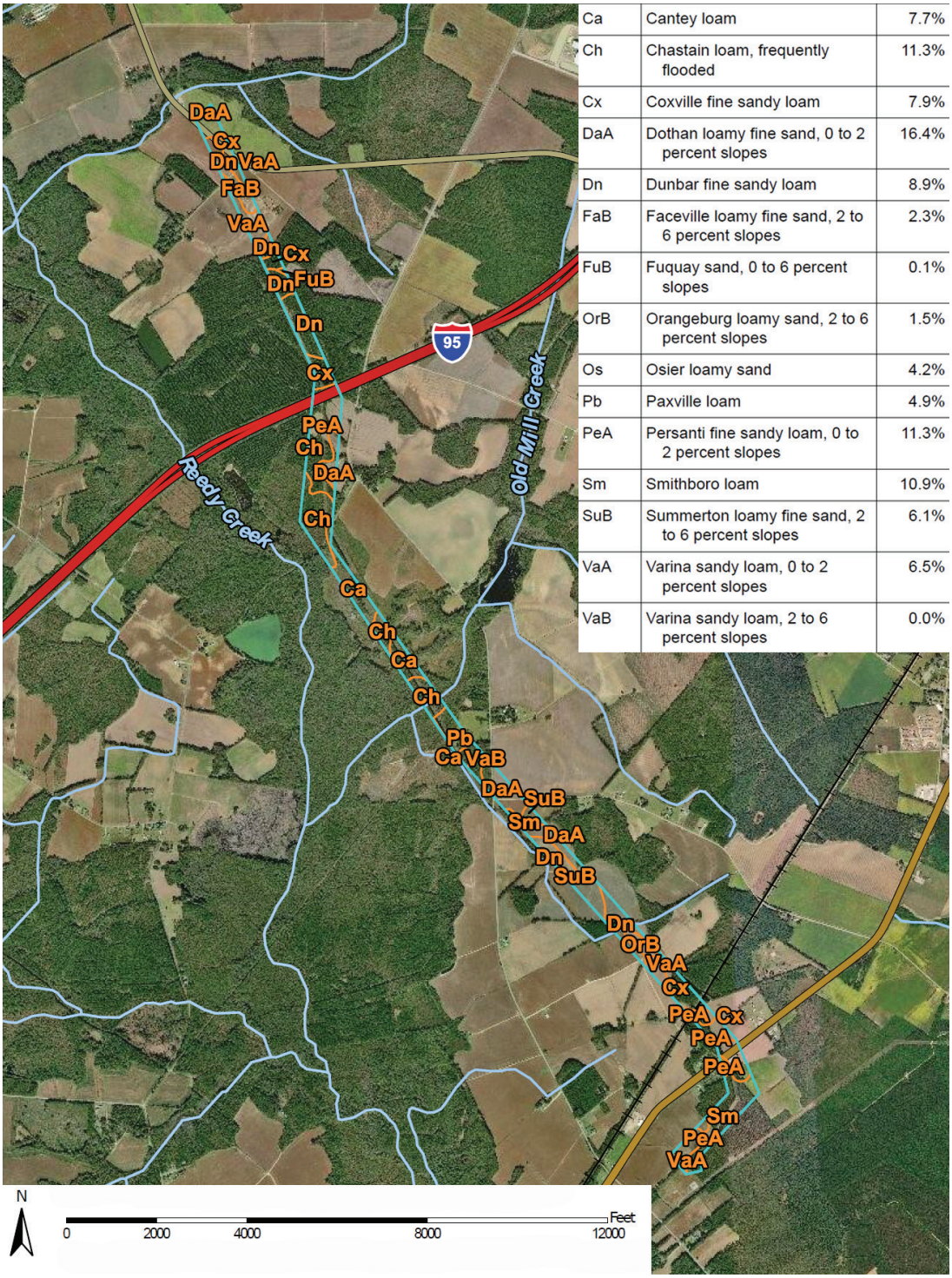
The geology is characteristic of the Coastal Plain. The parent materials of the soils are marine or fluvial deposits that consist of varying amounts of sands, silts, and clays. There are three terrace formations in the county formed during the Pleistocene Period. The Sunderland terrace is about 100 to 170 feet AMSL and makes up most of Dillon County. The project area is split between the Sunderland Terrace and the Wicomico terrace. The latter is about 70 to 100 feet AMSL and consists of the area along the Little Pee Dee River Swamp and its tributaries. The Penholoway terrace is about 42 to 70 feet AMSL. It makes up stream terrace soils along the Great Pee Dee, the Little Pee Dee, and the Lumber Rivers (Dudley 1978:56-57).

The project area contains 14 soil series – about equally divided between well drained (44.2% of the total) and poorly drained (55.8%) soils. The most abundant soils, while accounting for only about 16% of the corridor are the Dothan soils (Dudley 1978).

The Cantey loam soils are deep, poorly drained, and slowly permeable. They are formed on old marine terraces and the soils are saturated in the winter and early spring. Water runs off the surface very slowly. The A horizon is up to 0.5 foot, dark gray (10YR 4/1) loam. The underlying Btg1 horizon extends to 1.5 feet and is a gray (10YR6/1) clay.

The Cantey soils are very deep, poorly drained, and slowly permeable. They are formed on old marine terraces in the coastal plain and the soils are saturated in the winter and early spring. The A horizon soils are only about 0.5 foot in depth and consist of a dark gray (10YR4/1) loam. This overlies a Btg1 horizon to a depth of 1.5 feet consisting of a gray (10YR6/1) clay.

The Chastain soils are equally deep and



Ca	Cantey loam	7.7%
Ch	Chastain loam, frequently flooded	11.3%
Cx	Coxville fine sandy loam	7.9%
DaA	Dothan loamy fine sand, 0 to 2 percent slopes	16.4%
Dn	Dunbar fine sandy loam	8.9%
FaB	Faceville loamy fine sand, 2 to 6 percent slopes	2.3%
FuB	Fuquay sand, 0 to 6 percent slopes	0.1%
OrB	Orangeburg loamy sand, 2 to 6 percent slopes	1.5%
Os	Osier loamy sand	4.2%
Pb	Paxville loam	4.9%
PeA	Persanti fine sandy loam, 0 to 2 percent slopes	11.3%
Sm	Smithboro loam	10.9%
SuB	Summerton loamy fine sand, 2 to 6 percent slopes	6.1%
VaA	Varina sandy loam, 0 to 2 percent slopes	6.5%
VaB	Varina sandy loam, 2 to 6 percent slopes	0.0%

Figure 4. Soils in the project corridor.

Figure 5. Vegetation in the survey corridor. Upper photo shows standing water. Lower photo shows centerline entering wetland area.

Figure 6. . Vegetation in the survey corridor. Upper photo shows heavily vegetated wetlands. Lower photo shows the existing substation lot in Bethea Rural Historic District.

poorly drained, but are found in the flood plains of Reedy Creek and Buck Swamp. The A1 horizon is about 0.4 foot and consists of dark grayish brown (10YR4/2) loam, followed by a B1g horizon light brownish gray (10YR6/2) clay loam.

Coxville soils are also poorly drained and have formed in clayey Coastal Plain sediments. The A1 horizon is up to 0.6 foot in depth and consists of very dark gray (10YR3/1) fine sandy loam over an A2 horizon to 1.2 inches of light gray (10YR6/1) fine sandy loam. This rests of a light gray (10YR5/8) clay loam.

Dothan soils, which occur in slopes from 0-2%, have an Ap horizon of brown (10YR4/3) sandy loam to 1.1 feet in depth over a yellowish brown (10YR5/8) sandy clay loam to a depth of 1.8 feet.

Dunbar soils are found on broad, smooth interstream divides, mainly in the middle and upper Coastal Plains and are somewhat poorly drained. The Ap horizon is about 0.7 foot in depth and consists of dark gray (10YR4/1) sandy loam. It overlies a Bt horizon of light olive brown (2.5Y 5/4) clay loam to a depth of about 1.5 feet. Below this to a depth of about 1.8 feet is a Btg1 horizon of grayish brown (2.5Y5/2) sandy clay

The Faceville series consists of very deep, well drained, moderately permeable soils on uplands of the Southern Coastal Plain and are formed in red clayey marine sediments. The typical Ap horizon is about 0.4 foot in depth and consists of a brown (10YR4/3) fine sandy loam. Underlying is the BA horizon to a depth of about 1.1 feet, consisting of a yellowish red (5YR 5/6) sandy clay loam.

The Fuquay sands are very deep, well-drained sands formed in loamy coastal plain sediments. They exhibit an Ap horizon to a depth of about 0.7 foot of grayish brown (10YR5/2) sand. Below, to a depth of nearly 3 feet, is a light yellowish brown (2.5Y6/4) sand.

The Orangeburg series consists of very deep, well-drained, moderately permeable soils on uplands of the Southern Coastal Plain. The Ap horizon is about 0.7 foot in depth, consisting of a dark grayish brown (10YR4/2) loamy sand. This is found over a BA horizon to about a foot of strong brown (7.5YR5/6) sandy loam. The Bt1 horizon is found to a depth of nearly 4 feet and consists of a yellowish red (5YR4/6) sandy clay loam.

The Osier soils are very deep, poorly drained, rapidly permeable soils found on flood plains or low stream terraces. The A1 horizon is about 0.2 foot, consisting of a very dark grayish brown (10YR3/2) loamy fine sand. This is replaced by an A2 horizon of mixed dark gray (10YR4/1) and grayish brown (2.5Y5/2) loamy sand to about 0.7 foot. Below that is the Cg1 horizon of dark gray (10YR4/1) loamy sand.

Paxville soils are deep, very poorly drained, and moderately permeable. They are formed in loamy marine or fluvial Coastal Plain deposits. The Ap horizon is found to a depth of 0.8 foot and consists of black (10YR2/1) fine sandy loam. The blends into an A horizon of similar material to a depth of about 1.4 foot. Below is the Bt1g horizon of very dark grayish brown (10YR 3/2) fine sandy loam to a depth of about 2.8 feet.

Persanti soils have an Ap horizon of brown (10YR5/3) fine sandy loam to 0.5 foot over a B1 horizon of yellowish brown (10YR5/8) clay loam.

The Smithboro loams are somewhat poorly drained, consisting of an Ap horizon to about 0.5 foot of dark grayish brown (10YR4/2) and grayish brown (10YR5/2) silt loam. Below is a Bt horizon to about 1.5 foot, consisting of variegated brownish yellow (10YR6/6) and light brownish gray (10YR6/2) clay loam.

The Summerton series consists of very deep, well-drained, moderately slowly permeable soils that formed in thick sediments on old stream terraces. The profile consists of an Ap horizon of brown (7.5YR5/4) fine sandy loam to about 0.7 foot. Below is a Bta horizon to about 1.5 foot, consisting of red (2.5YR4/6) clay.

The Varina soils are well drained and most are found on slopes of 0 to 2%. The Ap horizon is about 0.6 foot in depth and consists of grayish brown (2.5Y5/2) sandy loam. Below is an E horizon of pale yellow (2.5Y7/4) loamy sand to about 1.2 feet.

Mills comments that the swampland soils are composed of the "richest soil." He notes that "[w]hile the swamp lands reclaimed and secured from freshets, will bring 50 dollars an acre; and the oak and hickory lands 15 dollars an acre; the pine lands will scarcely sell for 1 dollar per acre" (Mills 1972[1826]:623). He also observed that "[o]ff the water courses the situations are healthy," but "[a]s the swamps are the principal sources of disease in this country, it is much to be regretted that measures are not taken to drain, or reclaim them, which would not only secure the blessing of health to the people, but afford an immense quantity for rich soil for cultivation to the district" (Mills 1972[1826]:625). The products cultivated during that time were "cotton, corn, wheat, pease, and potatoes" (Mills 1972[1826]:623).

Climate

The general climate of the Dillon County area is characterized by mild humid conditions. This climate is influenced by the warm Gulf Stream, as well as by the Appalachian Mountains, which block the coldest air masses. Other factors include latitude, elevation, distance from the ocean, and location with respect to the average tracts of migratory cyclones. Day to day weather is controlled primarily by the movement of pressure systems across the nation. However, during the summer months there are few complete exchanges of air masses because tropical maritime air persists for extended periods (Dudley 1978).

The average annual precipitation in the Dillon area is 46 inches and is unevenly distributed throughout the year, with 29 inches occurring from April through October, which is the primary growing season (Dudley 1978).

The climate, according to Mills (1972[1826]:625), "taking the whole year round, is pleasant." The annual average temperature in Dillon is 61˚F, and the average monthly temperature ranges from 42˚F in January to 79˚F in July. Frozen precipitation occurs only one to three times a year during the winter season. The abundant supply of warm, moist and relatively unstable air produces frequent scattered showers and thunderstorms in the summer. Severe weather usually means violent thunderstorms, tornadoes, and hurricanes. The tropical storm season is in late summer and early fall, although storms may occur as early as May or as late as October (NOAA 1977). Heavy rains and high winds occur with tropical storms about once every six years. Storms of hurricane intensity are much more infrequent. Droughts have occurred twice in modern times-- in 1925 and 1954. Less severe dry periods have occurred more often, normally in late spring or in autumn (Dudley 1978).

Floristics

There are two major categories of plant communities that exist in the Coastal Plain area where there is nearly level topography. The first category consists of upland vegetation. Supported here are a mixture of coniferous and deciduous forests dominated by pines and broadleaf taxa such as upland oaks, sweetgum, hickories, and various understory species.

Lowland forests are located on the floodplains of the Pee Dee, Little Pee Dee, and Lumber rivers. This floodplain is 30 to 40 feet lower in elevation and is clearly defined by a scarp. These floodplain soils are forested with black cypress, gum, sycamore, water hickory, lowland oaks, soft maples, willows, and other herbaceous species.

In the early nineteenth century, Mills observed that:

> the long leafed pine is most abundant of the forest trees; next the cypress, various kinds of oak, the hickory, tupelo &c. Of fruit trees the peach, apple, pear, plum, &c. are common (Mills 1972[1826]:624).

Mills also observed that the major use of these forest resources was construction, also noting that "good clay is found in various places, suitable to make brick" (Mills 1972[1826]625). Only lime, largely made of burnt shells, needed to be imported into the area (primarily from neighboring Georgetown). Mills encouraged the residents to make better use of their local "shell limestone" for lime, a suggestion that appears to have made little impact in the local economy (Mills 1972[1826]:628).

Today, about a third of Dillon County's uplands have been cleared for cultivation. In fact, about half of the survey area is situated in fields planted in corn. The remainder of the corridor is found in frequently flooded wetland areas of Old Mill Creek and Reedy Creek.

Prehistoric and Historic Synthesis

Prehistoric Overview

Overviews for South Carolina's prehistory, while of differing lengths and complexity, are available in virtually every compliance report prepared. There are, in addition, some "classic" sources well worth attention, such as Joffre Coe's Formative Cultures (Coe 1964), as well as some new general overviews (such as Sassaman et al. 1990 and Goodyear and Hanson 1989). Also extremely helpful, perhaps even essential, are a handful of recent local synthetic statements, such as that offered by Sassaman and Anderson (1994) for the Middle and Late Archaic and by Anderson et al. (1992) for the Paleoindian and Early Archaic. Only a few of the many sources are included in this study, but they should be adequate to give the reader a "feel" for the area and help establish a context for the various sites identified in the study areas. For those desiring a more general synthesis, perhaps the most readable and well balanced is that offered by Judith Bense (1994), Archaeology of the Southeastern United States: Paleoindian to World War I. Figure 7 offers a generalized view of South Carolina's cultural periods.

Paleoindian Period

The Paleoindian Period, most commonly dated from about 12,000 to 10,000 B.P., is evidenced by basally thinned, side-notch projectile points; fluted, lanceolate projectile points; side scrapers; end scrapers; and drills (Coe 1964; Michie 1977; Williams 1965). Oliver (1981, 1985) has proposed to extend the Paleoindian dating in the North Carolina Piedmont to perhaps as early as 14,000 B.P., incorporating the Hardaway Side-Notched and Palmer Corner-Notched types, usually accepted as Early Archaic, as representatives of the terminal phase. This view, verbally suggested by Coe for a number of years, has considerable technological appeal.[1] Oliver suggests continuity from the Hardaway Blade through the Hardaway-Dalton to the Hardaway Side-Notched, eventually to the Palmer Side-Notched (Oliver 1985:199-200). While convincingly argued, this approach is not universally accepted.

The Paleoindian occupation, while widespread, does not appear to have been intensive. Artifacts are most frequently found along major river drainages, which Michie interprets to support the concept of an economy "oriented toward the exploitation of now extinct mega-fauna" (Michie 1977:124). Survey data for Paleoindian tools, most notably fluted points, is somewhat dated, but has been summarized by Charles and Michie (1992). They reveal a widespread distribution across the state (see also Anderson 1992b: Figure 5.1) with at least several concentrations relating to intensity of collector activity. What is clear is that points are found fairly far removed from the origin of the raw material. Charles and Michie suggest that this may "imply a geographically extensive settlement system" (Charles and Michie 1992:247).

[1] While never discussed by Coe at length, he did observe that many of the Hardaway points, especially from the lowest contexts, had facial fluting or thinning which, "in cases where the side-notches or basal portions were missing, . . . could be mistaken for fluted points of the Paleo-Indian period" (Coe 1964:64). While not an especially strong statement, it does reveal the formation of the concept. Further insight is offered by Ward's (1983:63) all too brief comments on the more recent investigations at the Hardaway site (see also Daniel 1992).

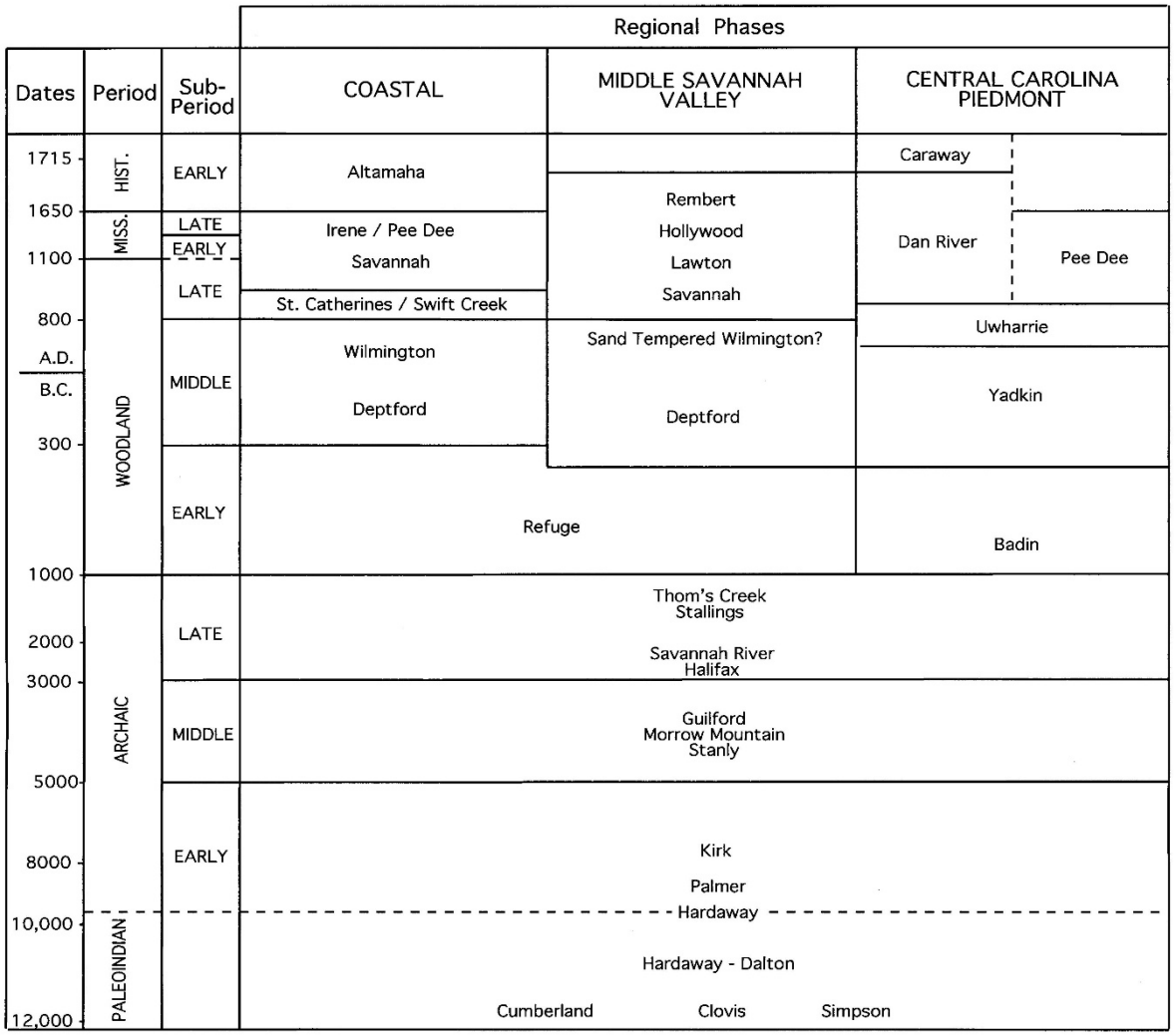


Figure 7. Generalized cultural sequences for South Carolina.

Although data are sparse, one of the more attractive theories that explains the widespread distribution of Paleoindian sites is the model tracking the replacement of a high technology forager (or HTF) adaptation by a "progressively more generalized band/microband foraging adaptation" accompanied by increasingly distinct regional traditions (perhaps reflecting movement either along or perhaps even between river drainages) (Anderson 1992b:46).

Distinctive projectile points include lanceolates such as Clovis, Dalton, perhaps the Hardaway, and Big Sandy (Coe 1964; Phelps 1983; Oliver 1985). A temporal sequence of Paleoindian projectile points was proposed by Williams (1965:24-51), but according to Phelps (1983:18) there is little stratigraphic or chronometric evidence for it. While this is certainly true, a number of authors, such as Anderson (1992a) and Oliver (1985) have assembled impressive data sets. We are inclined to believe that while often not conclusively proven by stratigraphic excavations (and such proof may be an unreasonable

expectation), there is a large body of circumstantial evidence. The weight of this evidence tends to provide considerable support.

Unfortunately, relatively little is known about Paleoindian subsistence strategies, settlement systems, or social organization (see, however, Anderson 1992b for an excellent overview and synthesis of what is known). Generally, archaeologists agree that the Paleoindian groups were at a band level of society, were nomadic, and were both hunters and foragers. While population density, based on isolated finds, is thought to have been low, Walthall suggests that toward the end of the period, "there was an increase in population density and in territoriality and that a number of new resource areas were beginning to be exploited" (Walthall 1980:30).

Archaic Period

The Archaic Period, which dates from 10,000 to 3,000 B.P.[2], does not form a sharp break with the Paleoindian Period, but is a slow transition characterized by a modern climate and an increase in the diversity of material culture. Associated with this is a reliance on a broad spectrum of small mammals, although the white tailed deer was likely the most commonly exploited animal. Archaic period assemblages, exemplified by corner-notched and broad-stemmed projectile points, are fairly common, perhaps because the swamps and drainages offered especially attractive ecotones.

Many researchers have reported data suggestive of a noticeable population increase from the Paleoindian into the Early Archaic. This has tentatively been associated with a greater emphasis on foraging. Diagnostic Early Archaic artifacts include the Kirk Corner Notched point. As previously discussed, Palmer points may be included with either the Paleoindian or the Archaic period, depending on theoretical perspective. As the climate became hotter and drier than the previous Paleoindian period, resulting in vegetational changes, it also affected settlement patterning as evidenced by a long-term Kirk phase midden deposit at the Hardaway site (Coe 1964:60). This is believed to have been the result of a change in subsistence strategies.

Settlements during the Early Archaic suggest the presence of a few very large, and apparently intensively occupied, sites that can best be considered base camps. Hardaway might be one such site. In addition, there were numerous small sites which produce only a few artifacts – these are the "network of tracks" mentioned by Ward (1983:65). The base camps produce a wide range of artifact types and raw materials that has suggested too many researchers long-term, perhaps seasonal or multi-seasonal, occupation. In contrast, the smaller sites are thought of as special purpose or foraging sites (see Ward 1983:67).

Middle Archaic (8,000 to 6,000 B.P.) diagnostic artifacts include Morrow Mountain, Guilford, Stanly, and Halifax projectile points. Much of our best information on the Middle Archaic

[2] The terminal point for the Archaic is no clearer than that for the Paleoindian and many researchers suggest a terminal date of 4,000 B.P. rather than 3,000 B.P. There is also the question of whether pottery, such as the fiber-tempered Stallings ware, will be included as Archaic, or will be included with the Woodland. Oliver, for example, argues that the inclusion of ceramics with Late Archaic attributes "complicates and confuses classification and interpretation needlessly" (Oliver 1981:20). He comments that according to the original definition of the Archaic, it "represents a preceramic horizon" and that "the presence of ceramics provides a convenient marker for separation of the Archaic and Woodland periods" (Oliver 1981:21). Others would counter that such an approach ignores cultural continuity and forces an artificial, and perhaps unrealistic, separation. Sassaman and Anderson (1994:38-44), for example, include Stallings and Thom's Creek wares in their discussion of "Late Archaic Pottery." While this issue has been of considerable importance along the Carolina and Georgia coasts, it has never affected the Piedmont, which seems to have embraced pottery far later, well into the conventional Woodland period. The importance of the issue in the nearby Sand Hills, unfortunately, is not well known.

comes from sites investigated west of the Appalachian Mountains, such as the work by Jeff Chapman and his students in the Little Tennessee River Valley (for a general overview see Chapman 1977, 1985a, 1985b). There is good evidence that Middle Archaic lithic technologies changed dramatically. End scrapers, at times associated with Paleoindian traditions, are discontinued, raw materials tend to reflect the greater use of locally available materials, and mortars are initially introduced. Associated with these technological changes there seem to also be some significant cultural modifications. Prepared burials begin to occur more commonly and storage pits are identified. The work at Middle Archaic river valley sites, with their evidence of a diverse floral and faunal subsistence base, seems to stand in stark contrast to Caldwell's Middle Archaic "Old Quartz Industry" of Georgia and the Carolinas, where axes, choppers, and ground and polished stone tools are very rare.

Among the most common of all Middle Archaic artifacts is the Morrow Mountain Stemmed projectile point that was originally divided into two varieties by Coe (1964:37,43) based primarily on the size of the blade and the stem. Morrow Mountain I points had relatively small triangular blades with short, pointed stems. Morrow Mountain II points had longer, narrower blades with long, tapered stems. Coe suggested a temporal sequence from Morrow Mountain I to Morrow Mountain II. While this has been rejected by some archaeologists, who suggest that the differences are entirely related to the life-stage of the point, the debate is far from settled and Coe has considerable support for his scenario.

The Morrow Mountain point is also important in our discussions since it represents a departure from the Carolina Stemmed Tradition. Coe has suggested that the groups responsible for the Middle Archaic Morrow Mountain (and the later Guilford points) were intrusive ("without any background" in Coe's words) into the North Carolina Piedmont, from the west, and were contemporaneous with the groups producing Stanly points (Coe 1964:122-123; see also Phelps 1983:23). Phelps, building on Coe, refers to the Morrow Mountain and Guilford as the "Western Intrusive horizon." Sassaman (1995) has recently proposed a scenario for the Morrow Mountain groups that would support this west-to-east time-transgressive process. Abbott and his colleagues, perhaps unaware of Sassaman's data, dismiss the concept, commenting that the shear distribution and number of these points "makes this position wholly untenable" (Abbott et al. 1995:9).

The controversy surrounding Morrow Mountain also includes its posited date range. Coe (1964:123) did not expect the Morrow Mountain to predate 6500 B.P., yet more recent research in Tennessee reveals a date range of about 7500 to 6500 B.P. Sassaman and Anderson (1994:24) observe that the South Carolina dates have never matched the antiquity of their more western counterparts and suggest continuation to perhaps as late as 5500 B.P. In fact, they suggest that even later dates are possible since it can often be difficult to separate Morrow Mountain and Guilford points.

A recently defined point is the MALA. The term is an acronym standing for Middle Archaic and Late Archaic, the strata in which these points were first encountered at the Pen Point site (38BR383) in Barnwell County, South Carolina (Sassaman 1985). These stemmed and notched lanceolate points were originally found in a context suggesting a single-episode event with variation not based on temporal variation. The original discussion was explicitly worded to avoid application of a typology, although as Sassaman and Anderson (1994:27) note, the "type" has spread into more common usage. There are possible connections with both the Halifax points of North Carolina and the Benton points of the middle Tennessee River valley, while the "heartland" for the MALA appears confined to the lower middle Coastal Plain of South Carolina.

The available information has resulted in a variety of competing settlement models. Some argue for increased sedentism and a reduction of mobility (see Goodyear et al. 1979:111). Ward argues that the most appropriate model is one that

includes relatively stable and sedentary hunters and gatherers "primarily adapted to the varied and rich resource base offered by the major alluvial valleys" (Ward 1983:69). While he recognizes the presence of "inter-riverine" sites, he discounts explanations that focus on seasonal rounds, suggesting, "alternative explanations . . . [including] a wide range of adaptive responses." Most importantly, he notes that:

> the seasonal transhumance model and the sedentary model are opposite ends of a continuum, and in all likelihood variations on these two themes probably existed in different regions at different times throughout the Archaic period (Ward 1983:69).

Others suggest increased mobility during the Archaic (see Cable 1982). Sassaman (1983) has suggested that the Morrow Mountain phase people had a great deal of residential mobility, based on the variety of environmental zones they are found in and the lack of site diversity. The high level of mobility, coupled with the rapid replacement of these points, may help explain the seemingly large numbers of sites with Middle Archaic assemblages. Curiously, the later Guilford phase sites are not as widely distributed, perhaps suggesting that only certain microenvironments were used (cf. Ward [1983:68-69] who would likely reject the notion that substantially different environmental zones are, in fact, represented).

Recently Abbott et al. argue for a combination of these models, noting that the almost certain increase in population levels probably resulted in a contraction of local territories. With small territories, there would have been significantly greater pressure to successfully exploit the limited resources by more frequent movement of camps. They discount the idea that these territories could have been exploited from a single base camp without horticultural technology. Abbott and his colleagues conclude, "increased residential mobility under such conditions may in fact represent a common stage in the development of sedentism" (Abbott et al. 1995:9).

From excavations at a Sand Hills site in Chesterfield County, South Carolina, Gunn and his colleague (Gunn and Wilson 1993), offer an alternative model for Middle Archaic settlement. He accepts that the uplands were desiccated from global warming, but rather than limiting occupation, this environmental change made the area more attractive for residential base camps. Gunn and Wilson suggest that the open, or fringe, habitat of the upland margins would have been attractive to a wide variety of plant and animal species.

The Late Archaic, usually dated from 6,000 to 3,000 or 4,000 B.P., is characterized by the appearance of large, square stemmed Savannah River projectile points (Coe 1964). These people continued to intensively exploit the uplands much like earlier Archaic groups with, the bulk of our data for this period coming from the Uwharrie region in North Carolina.

One of the more debated issues of the Late Archaic is the typology of the Savannah River Stemmed and its various diminutive forms. Oliver, refining Coe's (1964) original Savannah River Stemmed type and a small variant from Gaston (South 1959:153-157), developed a complete sequence of stemmed points that decrease uniformly in size through time (Oliver 1981, 1985). Specifically, he sees the progression from Savannah River Stemmed to Small Savannah River Stemmed to Gypsy Stemmed to Swannanoa from about 5000 B.P. to about 1,500 B.P. He also notes that the latter two forms are associated with Woodland pottery.

This reconstruction is still debated with a number of archaeologists expressing concern with what they see as typological overlap and ambiguity. They point to a dearth of radiocarbon dates and good excavation contexts at the same time they express concern with the application of this typology outside the North Carolina Piedmont (see, for a synopsis, Sassaman and Anderson 1990:158-162, 1994:35).

In addition to the presence of Savannah River points, the Late Archaic also witnessed the introduction of steatite vessels (see Coe 1964:112-113; Sassaman 1993), polished and pecked stone artifacts, and grinding stones. Some also include the introduction of fiber-tempered pottery about 4000 B.P. in the Late Archaic (for a discussion see Sassaman and Anderson 1994:38-44). This innovation is of special importance along the Georgia and South Carolina coasts, but seems to have had only minimal impact in the uplands of South or North Carolina.

There is evidence that during the Late Archaic the climate began to approximate modern climatic conditions. Rainfall increased resulting in a more lush vegetation pattern. The pollen record indicates an increase in pine that reduced the oak-hickory nut masts that previously were so widespread. This change probably affected settlement patterning since nut masts were now more isolated and concentrated. From research in the Savannah River valley near Aiken, South Carolina, Sassaman has found considerable diversity in Late Archaic site types with sites occurring in virtually every upland environmental zone. He suggests that this more complex settlement pattern evolved from an increasingly complex socio-economic system. While it is unlikely that this model can be simply transferred to the Sand Hills of South Carolina without an extensive review of site data and micro-environmental data, it does demonstrate one approach to understanding the transition from Archaic to Woodland.

Woodland Period

As previously discussed, there are those who see the Woodland beginning with the introduction of pottery. Under this scenario, the Early Woodland may begin as early as 4,500 B.P. and continued to about 2,300 B.P. Diagnostics would include the small variety of the Late Archaic Savannah River Stemmed point (Oliver 1985) and pottery of the Stallings and Thoms Creek series. These sand tempered Thoms Creek wares are decorated using punctations, jab-and-drag, and incised designs (Trinkley 1976). Also potentially included are Refuge wares, also characterized by sandy paste, but often having only a plain or dentate-stamped surface (Waring 1968). Others would have the Woodland beginning about 3,000 B.P. and perhaps as late as 2,500 B.P. with the introduction of pottery that is cord-marked or fabric-impressed and suggestive of influences from northern cultures.

There remains, in South Carolina, considerable ambiguity regarding the pottery series found in the Sandhills and their association with coastal plain and piedmont types. The earliest pottery found at many sites may be called either Deptford or Yadkin, depending on the research or their inclination at any given moment.

The Deptford phase, which dates from 3050 to 1350 B.P., is best characterized by fine to coarse sandy paste pottery with a check stamped surface treatment. The Deptford settlement pattern involves both coastal and inland sites.

Inland sites such as 38AK228-W, 38LX5, 38RD60, and 38BM40 indicate the presence of an extensive Deptford occupation on the Fall Line and the Inner Coastal Plain/Sand Hills, although sandy, acidic soils preclude statements on the subsistence base (Anderson 1979; Ryan 1972; Trinkley 1980). These interior or upland Deptford sites, however, are strongly associated with the swamp terrace edge, and this environment is productive not only in nut masts, but in large mammals such as deer. Perhaps the best data concerning Deptford "base camps" comes from the Lewis-West site (38AK228-W), where evidence of abundant food remains, storage pit features, elaborate material culture, mortuary behavior, and craft specialization has been reported (Sassaman et al. 1990:96-98; see also Sassaman 1993 for similar data recovered from 38AK157).

Further to the north and west, in the Piedmont, the Early Woodland is marked by a pottery type defined by Coe (1964:27-29) as Badin. This pottery is identified as having very fine sand in the paste with an occasional pebble. Coe identified cord-marked, fabric-marked, net-

impressed, and plain surface finishes. Beyond this pottery, little is known about the makers of the Badin wares and relatively few of these sherds are reported from South Carolina sites.

Somewhat more information is available for the Middle Woodland, typically given the range of about 2,300 B.P. to 1,200 B.P. In the Piedmont and even into the Sand Hills, the dominant Middle Woodland ceramic type is typically identified as the Yadkin series. Characterized by a crushed quartz temper the pottery includes surface treatments of cord-marked, fabric-marked, and a very few linear check-stamped sherds (Coe 1964:30-32). It is regrettable that several of the seemingly "best" Yadkin sites, such as the Trestle site (31An19) explored by Peter Cooper (Ward 1983:72-73), have never been published.

Yadkin ceramics are associated with medium-sized triangular points, although Oliver (1981) suggests that a continuation of the Piedmont Stemmed Tradition to at least 1650 B.P. coexisted with this Triangular Tradition. The Yadkin in South Carolina has been best explored by research at 38SU83 in Sumter County (Blanton et al. 1986) and at 38FL249 in Florence County (Trinkley et al. 1993)

In some respects the Late Woodland (1,200 B.P. to 400 B.P.) may be characterized as a continuation of previous Middle Woodland cultural assemblages. While outside the Carolinas there were major cultural changes, such as the continued development and elaboration of agriculture, the Carolina groups settled into a lifeway not appreciably different from that observed for the previous 500-700 years. From the vantage point of the Middle Savannah Valley Sassaman and his colleagues note that, "the Late Woodland is difficult to delineate typologically from its antecedent or from the subsequent Mississippian period" (Sassaman et al. 1990:14). This situation would remain unchanged until the development of the South Appalachian Mississippian complex (see Ferguson 1971).

Historic Overview

What is today known as Dillon County was originally part of Craven County and subsequently part of Parish of Saint James Santee when it was created in 1706. The area next was divided to form the northern tips of both the Parishes of Prince George Winyah and Prince Frederick, formed in 1721 and 1734 respectively from a section of Saint James Santee. Later Dillon formed part of the George Town District Court when it was established in 1769, later becoming Liberty County with the subdivision of the George Town District in 1785. The name was changed into Marion District in 1798 and then Marion County in 1868 (Stokes 1978).

When the historic resources of this portion of South Carolina are examined, few pre-date the late nineteenth century. Latta, Dillon County's second largest town, was developed in an area previously known as Nellie's Field. Like the town of Dillon, Latta began in 1887 with the building of the new rail line (Anonymous 1970). Dillon's other major community, Lake View, was incorporated in 1907 as Page's Mill, although the name was changed to Lake View in 1916. Older resources include the Cotton Press Farm, five miles west of Latta on S-38, portions of which date to 1791 when it was built by John Hayes. The Bear Swamp Baptist Church is situated on the site of a meetinghouse built in 1785 on the north bank of Bear Swamp at a point midway between Fayetteville, North Carolina and Georgetown, South Carolina. The original meetinghouse burned in 1825 and rebuilt in 1830-1831 (Anonymous 1970). The W.C. Parham House, of two-story frame construction, is thought to have been constructed ca. 1840 by Woodward Manning (Simpson 1984).

The Dillon region was described by the Methodist bishop, Francis Asbury, in glowing terms during the post-Revolutionary period:

> We crossed Little Pee Dee at the Potato Bed Ferry. Beautiful deep sands, live oaks, lofty pines,

> palmetto swamps, with intermingled gums and laurel, and twining Jessamine flinging its odours far and wide around; lawns and savannahs such is the country, and such the charming scenes through which we have frequently passed in our late rides (quoted in Stokes 1978:7).

And while this description is indeed romantic, Stokes comments that:

> However inspiring this prospect is today . . . the dense foliage and lush growth of the bogs and marshy river lowlands greatly impeded the actual settlement and subsequent cultivation of the region in South Carolina's colonial period . . . rivers and streams were extensively used as arteries of travel and transportation in the lowcountry of South Carolina. But the meandering watercourses of the Pee Dee and its tributaries were all bordered by morasses choked with wiry vegetation that were the habitat of alligators, dangerous reptiles, and pestilent insects, making access to and from the streams exceedingly difficult (Stokes 1978:8).

A northern visitor perhaps said it more succinctly:

> South Carolina, at least the region traversed by railway, is the most miserable country I ever saw. Swamp, swamp, swamp, all day long. No villages, no houses, no inhabitants, no garden fields, nothing but an interminable swamp. Every half-hour we stop in the middle of the swamp (Lyman Abbott quoted in Drago 1991:15).

Consequently, while the early settlement did focus on the Great and Little Pee Dee and their tributaries as both transportation and communication routes, the process was slow and settlements were sparse. The earliest settlers entered the region, primarily from North Carolina and Virginia, during the mid-eighteenth century (Dudley 1978). The 1775 Mouzon map documents this pattern of early settlement in Dillon County, with a focus on inland creeks with easy access to the major rivers. It is only during the nineteenth century that maps begin to show settlement expanding along the developing road systems.

Settlement during the early eighteenth century was also hampered by the remote location of Dillon, which isolated it from other sections of the Carolina backcountry. The two principal trade routes from Charleston into Virginia – one west of the Great Pee Dee towards Charlotte, the other along the coast through Georgetown and Wilmington – skirted Dillon to the east and west, providing little direct access to the region (Stokes 1978). The backcountry lands were often purchased for speculation, although those who settled the region probably first participated in the simple economy beef production – allowing cattle to range through swamplands. This required little capital and could be accomplished with little labor. Later it is likely that the region participated in indigo cultivation, although it seems certain that semi-subsistence farming was always the primary occupation.

While geographically part of the Coastal Plain, the Dillon and Pee Dee region continued to be too remote and isolated from the seat of government in Charleston during the early eighteenth century to feel the "taming influences of church and state" (King 1981:7). More to the point, however, there were a variety of serious complaints the Pee Dee region (as well as the rest of the "lower middle country") had with Charleston. These included both a lack of adequate law enforcement as well as economic policies, which hurt the region. These problems created a division between the wealthy planters of

Charleston and the small farmers more typical of the interior. In the wake of what many called broken trust, the Regulator movement was created, dominating Dillon like other regions of the backcountry (see Brown 1963).

By the time the Regulators disbanded they had achieved considerable success in reforming the political and economic structure of the region. The Circuit Court Act of 1769 established a system of courts, jails, and sheriffs in four newly created backcountry judicial districts. They had also succeeded in electing six of their candidates to the colonial assembly. Regulations on deer hunting were passed, and many of the Regulators were pardoned for various offenses. Certainly, it helped that prominent lowcountry planters were also expanding their own economic interests into the backcountry. Klein (1990) notes that while deep suspicions still existed between the sections, there was an increasing awareness of the powerful economic interests that were drawing the regions closer together.

One of these interests was the brewing revolution. Like other areas dominated by Regulator philosophies, when the American Revolution began, there was very little enthusiasm for the goal of freedom from Britain in the Dillon area. In fact, it wasn't politics of the realm, but the politics of confiscation that eventually goaded the upcountry residents into the war. Neutrality faded with the increasingly common "predatory incursions" of Tories from the Scotch settlements in the Cape Fear Valley (Stokes 1978:32). Three skirmishes were fought in the general Dillon area. The first was the attack on Brown's Regiment in Bear Swamp on October 30, 1780. The second, at Catfish Creek near Hulin's Mill, later known as Bass' Mill, occurred in April 1781. The third, in August 1781, was the battle fought near the Great Pee Dee and Marsh Creek in both Marion and Dillon counties (Stokes 1978).

Another interest drawing together the backcountry and lowcountry was slavery. In 1760, the entire backcountry had on 2,417 African American slaves, representing 4% of the total slave population in Carolina. In contrast, the lowcountry contained 44,501 slaves, representing at least 77% of the total slave population of Carolina (Klein 1990:20). In order to expand production and enter the colony wide trade pattern, some backcountry planters were expanding their slave holdings. By 1768, about one-twelfth of South Carolina's slaves lived in the backcountry, where they represented about 20% of the population. In the early 1770s, a wealthy Charleston slave merchant, Peter Manigault, remarked that:

> The great Planters have bought few Negroes within these two Years. Upwards of two thirds that have been imported have gone backwards. These people some of them come at the Distance of 300 miles from Chs Town, and will not go back without Negroes, let the Price be what it will. And indeed they can afford it, for it is no uncommon Thing among them to make 150 wt of Indigo to a Hand, and Even at the present price of Indigo and Help, as their Lands cost them little they can well afford to pay £450 for a Negro (quoted in Klein 1990:20).

Even before the Revolution the backcountry's wealthiest slave holders were concentrated below the fall line, in the region that would later be termed the "middle country" and that contained today's Dillon County. This middle territory provided somewhat easier access to markets and formed a transition zone into the "true" backcountry. In 1770, the 221 plantations of the middlecountry had 1,432 slaves compared to the 177 slaves on the 83 upcountry plantations. The top quintile of the middlecountry plantations had a value of £274,103, compared to only £50,412 for the top quintile of upcountry estates (Klein 1990:22). Into the early 1800s the middlecountry, and especially the Cheraws region, remained transitional between the predominately

slave owning lowcountry and the yeoman upcountry. Slaves in the middlecountry composed about a third of the whole population and slave-holders composed about a third of all households.

Cotton, while making inroads and creating a greater demand for African American slaves in some middlecountry regions (especially around Camden where a new plantation elite was developing), had relatively little impact on the Cheraws or Dillon area. For example, while the slave population increased 139% from 5,519 to 13,202 between 1790 and 1800 in the Camden area, it increased only 51% in the Cheraws, where the number of slaves grew from 3,229 to 4,877. By 1810, there were 6,079 slaves in the Cheraw region, an increase of only 25% from 1800 (Klein 1990).

Figure 8. Portion of Mills' *Atlas* for Marion District, showing the vicinity of the study corridor in today's Dillon County.

In the early nineteenth century, Robert Mills remarked that Marion (then containing the land that would later form Dillon County) was noted for its swamps, which offered the most productive, richest soils, especially compared to the upland, which was sandy. When reclaimed and "secured from freshets" the swamps brought $50 an acre, compared to only $1 an acre for the upland pine lands (Mills 1972[1826]:623). Plantations, while not common, planted cotton, corn, potatoes, and wheat. The 1826 Mills' Atlas for the Marion District shows no settlements in the project area, although there are several on nearby roads (Figure 8).

In 1850, 9,781 whites and 7,520 blacks inhabited Marion County, although the county exhibits a relatively modest standing when its agricultural production is examined. Marion ranked 17th (out of 29) in cotton production, with a yield of 8,680 bales (or 3,472,000 pounds) of ginned cotton and 17th in corn production, with 476,718 bushels. Only 817 pounds of tobacco and 2,986 bushels of wheat were produced. Marion did, however, rank in the top 10 rice-producing counties, with 513,825 pounds largely being harvested from inland swamps (DeBow 1854).

The Civil War was relatively gentle on the Pee Dee region, although Sherman's troops traveled through the valleys of both Pee Dees in 1868, causing extensive damage and loss (Stokes 1978). After the Civil War and the emancipation of the large slave population, the plantation system as it existed prior to the war was radically altered through the adoption of labor contracts and later cash tenancy. In many respects, the labor contracts established a new form of slavery – being as strict as bondage and offering as little hope of

economic and social freedom. A typical labor contract after the war required black laborers to perform "any and all kinds of work usually done on a plantation" and "to stay on the place all the time." The laborers were required to:

> Get up at daybreak and do such small jobs about the house that are to be done before Breakfast, to have their Breakfast eaten and be ready to go at regular work by the time the sun is fully up and work all day except one hour and a half for Dinner from the 1st of May until the 1st of October and one hour for Dinner the balance of the year (Stokes 1978:95).

Furthermore, parents were required to "see that their children work," and to assume accountability for their offspring if they lost or broke tools or damaged the farm animals by abuse. A typical contract gave blacks "sixty bushels of corn, and board for himself wife & six children with three suits of clothing during the year and Leather enough to make himself wife and Their oldest children one pair of shoes" (Stokes 1978:95).

Sidney Andrews, a journalist who toured South Carolina in 1865, described the blacks in Marion District "orderly," even though they were "receiving what he considered starvation pay" (Stokes 1978:97). He also found the white landowners uncooperative in complying with their part of the contracts, often delaying payments after harvest, or refusing to provide promised provisions for minor infractions (Stokes 1978). This reaction to blacks was predictable – in 1869 the local newspaper, the Star, remarked "THE OWNERS OF THE SOIL MUST CONTROL THE LABOR" and added, "Those who own the soil should govern it." Eventually the Jim Crow laws codified a new form of black slavery that lasted well into the twentieth century.

Efforts to recover after the Civil War were hindered not only by the repressive nature of Southern whites, but also by an associated slump in agricultural production that dramatically reduced cash flow. In 1870, the Marion area produced only 5,267 bales of cotton, down by nearly 40%. Corn production, as an indicator of subsistence rather than cash farming, was down by 50%. Some recovery was taking place by 1890, when corn production was up to 401,788 bushels, although this was still 16% less than the 1850-corn production. Cotton, however, was up to 25,993 bales – an increase over 1850 levels by nearly 200% (Stokes 1978).

By the 1880s, Marion's agricultural system was reportedly dominated by wage labor, although at least 500 farms were "rented" by blacks and another 1,000 farms were worked by blacks (The News and Courier 1884).

In addition to agriculture, the county also boasted 90 flour and gristmills, 31 lumber mills, 22 turpentine stills, and one foundry. Stokes (1978) observes that while industries such as turpentine and rosin production provided relatively little income, they were steady. The greatest problem, however, remained transportation and getting items to the lowcountry markets. Consequently, settlement and economic growth remained sparse and poor until the development of the Atlantic Coastline Railroad between 1887 and 1888. The Atlantic Coast Line Railroad wanted to join its lines between North Carolina and Florence and while the shortest route was via Little Rock (northwest of present Dillon), right-of-way could not be acquired. A local resident, James W. Dillon, offered the rail line half interest in an alternate route with the single stipulation being that a stop be established in the vicinity of what is today Dillon (Anonymous 1970). Commenting on the new town of Dillon, one observer remarked that:

> His municipal namesake is a town of wide streets that begin in fields of tobacco, cotton, and wheat and end at the courthouse, which covers the site of Revolutionary war skirmishes. Produce flows in to be shipped to Eastern and Northern markets by rail or truck.

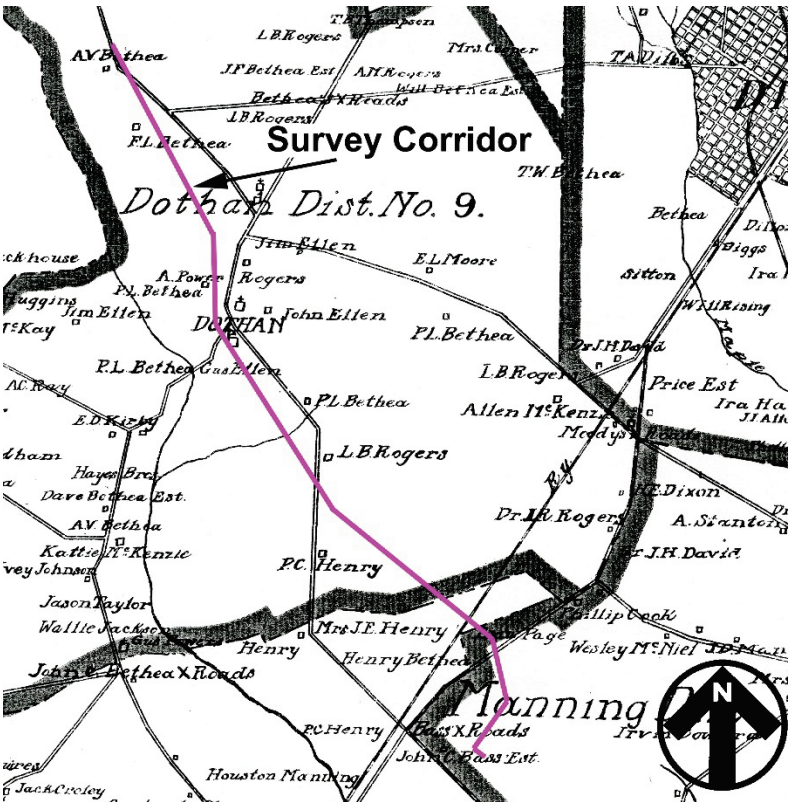


Figure 9. Portion of Otis Page's 1919-1920 *Map of Dillon County* showing the study area.

A textile mill and other factories have brought industrial interests into this farming area. Older residents remember when the business section was a pond where they caught trout, redbreast, and bream (Work Projects Administration 1988 [1941]:464).

Into the twentieth century, Marion continued to be a rather sleepy county. By 1900, the population was only 35,181. In the first decade of the twentieth century, cotton was planted on 32,904 acres, second only to corn and producing 31,488 bales (there were even two cotton mills in the county). Tobacco, made popular by the adoption of bright leaf flue-cured varieties, was planted on 7,336 acres and produced 6,145,000 pounds (Watson 1907).

Incorporation in February 1910 established Dillon as a separate political and judicial entity from Marion County. Resulting from complaints primarily centered on transportation problems and the distance from the county seat, this step established a more "manageable" county encompassing about half the acreage of previous Marion County. One of the earliest surveys of the new county, "Map of Dillon County, South Carolina," compiled by Otis M. Page in 1919-1920 shows the project area with no especially close settlements.

Dudley (1978) noted that the population of Dillon steadily declined in the first third of the twentieth century, largely the result of a depressed economy and poor agricultural practices, which caused extensive sheet erosion. It was only in the second half of this century that the population steadied and once again began to increase. By 1921, there were 60,000 acres in cotton producing 35,000 bales and 31,000 acres planted in corn with a yield of 589,000 bushels (Stokes 1978).

The 1931 soil survey for Dillon County (Figure 10) and the 1938 General Highway and Transportation Map of Dillon County (Figure 11) show structures in the vicinity, however, the detail is insufficient to determine if they are in the project corridor.

Previous Archaeological Investigations

We have previously noted (see Figure 3) that a number of archaeological studies have been conducted in the area and that a countywide architectural survey has taken place. Regardless, none of previous archaeological surveys, including

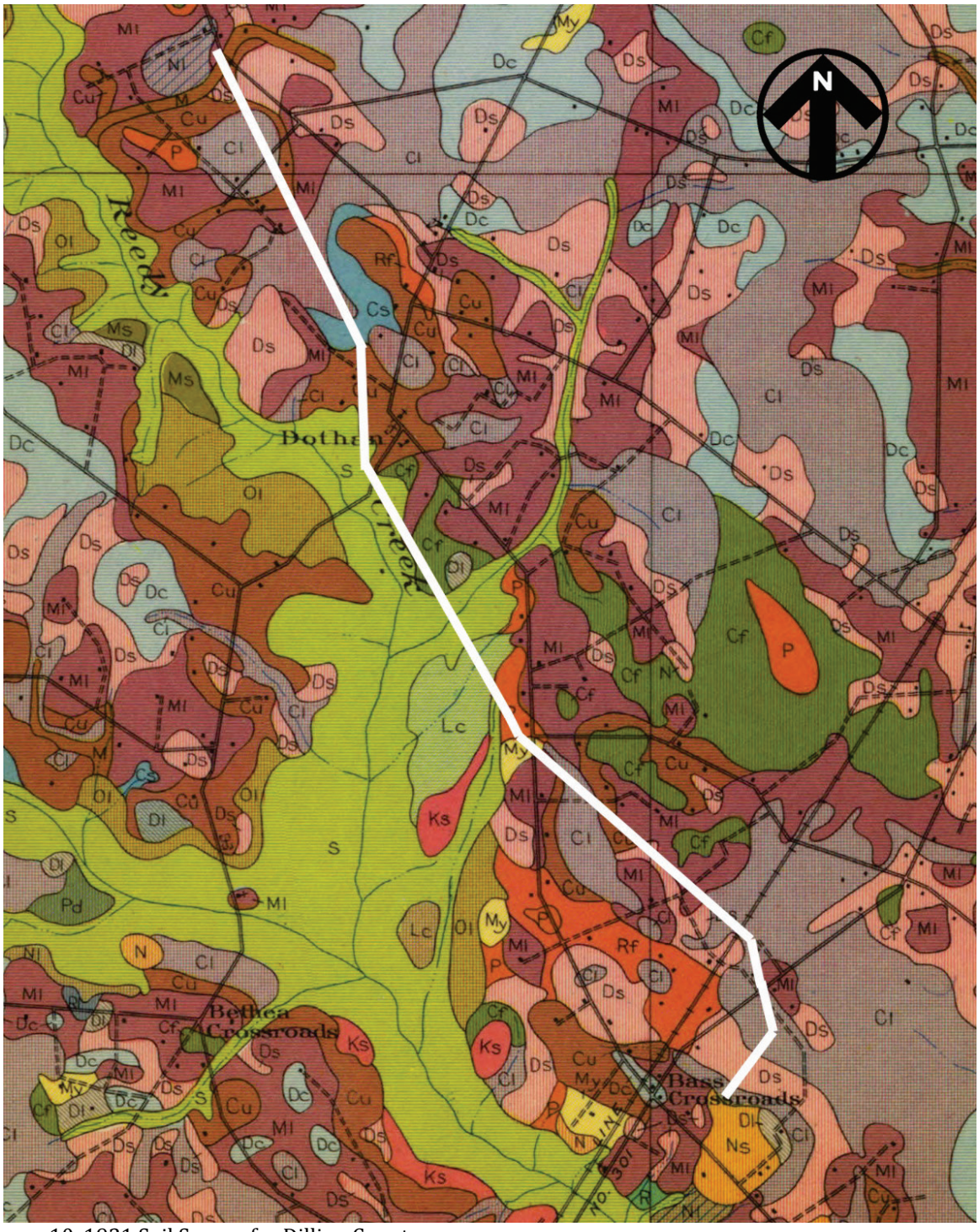


Figure 10. 1931 Soil Survey for Dillion County.

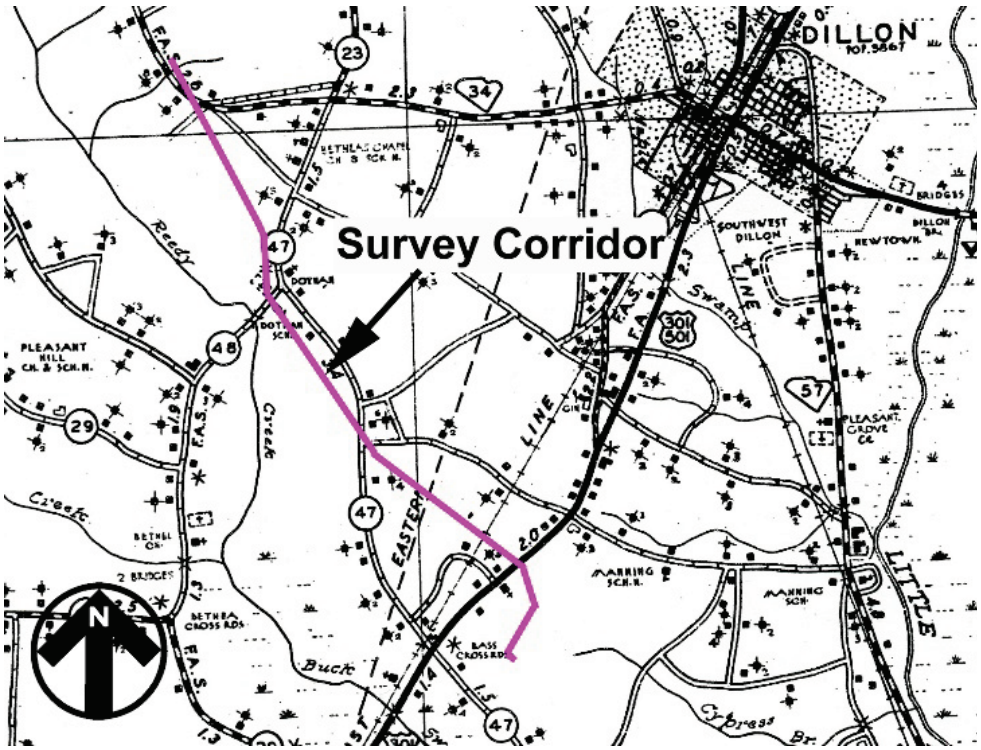


Figure 11. Portion of the 1938 *General Highway and Transportation Map of Dillon County* showing the project area.

those that impinge on the study corridor, have produced archaeological sites. Several structures are associated with the Bethea Rural Historic District.

Methods

Archaeological Field Methods

The initially proposed field techniques involved the placement of shovel tests at 100-foot intervals along the centerline of the corridor, which was staked at the time of the survey. Since the corridor is only 70 feet in width, a single transect was deemed satisfactory.

All soil would be screened through ¼-inch mesh, with each test numbered sequentially along the corridor (corresponding to the station number). Each test would measure about 1 foot square and would be taken to a depth of at least 1.0 foot or until subsoil was encountered. All cultural remains would be collected, except for mortar and brick, which would be quantitatively noted in the field and discarded. Notes would be maintained for profiles at any sites encountered.

Should sites (defined by the presence of three or more artifacts from either surface survey or shovel tests within a 50 feet area) be identified, further tests would be used to obtain data on site boundaries, artifact quantity and diversity, site integrity, and temporal affiliation. For small or very recent sites, these tests would be placed at 25 to 50 feet intervals in a simple cruciform pattern until two consecutive negative shovel tests were encountered. For larger sites or sites where we felt there was a potential for National Register eligibility, shovel tests would incorporate the entire site within the project corridor. Again, shovel tests would be placed at 25 to 50 foot intervals. We are precluded from examining areas outside the corridor by the easements obtain by Central Carolina Power Cooperative.

The information required for completion of South Carolina Institute of Archaeology and Anthropology site forms would be collected and photographs would be taken, if warranted in the opinion of the field investigator.

These proposed techniques along the transect were implemented with no modifications. A total of 286 shovel tests were anticipated in the corridor. Because of extensive wetland areas with standing water, only 181 were actually excavated in the survey corridor. Generally, the closer the transect got to one of the creeks and its swamps, the wetter the soils became. The soils map (Figure 4) also documents this.

Although the centerline was staked, we found that in several areas the local farmers had removed all of the centerline pipes and stacked them at the edge of their field. Fortunately, this did not pose a significant problem since the proposed corridor parallels an existing Santee Cooper corridor.

The GPS positions were taken with a WAAS enabled Garmin 76 rover that tracks up to twelve satellites, each with a separate channel that is continuously being read. The benefit of parallel channel receivers is their improved sensitivity and ability to obtain and hold a satellite lock in difficult situations, such as in forests or urban environments where signal obstruction is a frequent problem. This was a vital concern for the study area.

Architectural Survey

As previously discussed, we elected to use a 50-foot area of potential effect (APE). The architectural survey would record buildings, sites, structures, and objects that appeared to have been constructed before 1950. Typical of such projects,

this survey recorded only those which have retained "some measure of its historic integrity" (Vivian 2001:5) and which were visible from public roads.

For each identified resource, we would complete a Statewide Survey Site Form and at least two representative photographs were taken. The Survey Staff of the S.C. Department of Archives and History would assign permanent control numbers at the conclusion of the study. The Site Forms for the resources identified during this study would be submitted to the S.C. Department of Archives and History.

Site Evaluation

Archaeological sites would be evaluated for further work based on the eligibility criteria for the National Register of Historic Places. Chicora Foundation only provides an opinion of National Register eligibility and the final determination is made by the lead federal agency, in consultation with the State Historic Preservation Officer at the South Carolina Department of Archives and History.

The criteria for eligibility to the National Register of Historic Places is described by 36CFR60.4, which states:

> the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and
>
> a. that are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> b. that are associated with the lives of persons significant in our past; or
>
> c. that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> d. that have yielded, or may be likely to yield, information important in prehistory or history.

National Register Bulletin 36 (Townsend et al. 1993) provides an evaluative process that contains five steps for forming a clearly defined explicit rationale for either the site's eligibility or lack of eligibility. Briefly, these steps are:

- identification of the site's data sets or categories of archaeological information such as ceramics, lithics, subsistence remains, architectural remains, or sub-surface features;

- identification of the historic context applicable to the site, providing a framework for the evaluative process;

- identification of the important research questions the site might be able to address, given the data sets and the context;

- evaluation of the site's archaeological integrity to ensure that the data sets were sufficiently well preserved to address the research questions; and

- identification of important research questions among all of those that might be asked and answered at the site.

This approach, of course, has been developed for use documenting eligibility of sites being actually nominated to the National Register of Historic Places where the evaluative process

Figure 12. Project area. Upper photo shows soil stratigraphy of a typical shovel test in one of the agricultural fields. The lower photo shows standing water in proposed corridor centerline.

must stand alone, with relatively little reference to other documentation and where typically only one site is being considered. As a result, some aspects of the evaluative process have been summarized, but we have tried to focus on an archaeological site's ability to address significant research topics within the context of its available data sets.

For architectural sites, the evaluative process was somewhat different. Given the relatively limited architectural data available for most of the properties, we focus on evaluating these sites using National Register Criterion C, looking at the site's "distinctive characteristics." Key to this concept is the issue of integrity. This means that the property needs to have retained, essentially intact, its physical identity from the historic period.

Particular attention would be given to the integrity of design, workmanship, and materials. Design includes the organization of space, proportion, scale, technology, ornamentation, and materials. As *National Register Bulletin* 36 observes, "Recognizability of a property, or the ability of a property to convey its significance, depends largely upon the degree to which the design of the property is intact" (Townsend et al. 1993:18). Workmanship is evidence of the artisan's labor and skill and can apply either to the entire property or to specific features of the property. Finally, materials – the physical items used on and in the property – are "of paramount importance under Criterion C" (Townsend et al. 1993:19). Integrity here is reflected by maintenance of the original material and avoidance of replacement materials.

Laboratory Analysis

The cleaning and analysis of artifacts that might be collected would be conducted in Columbia at the Chicora Foundation laboratories. Any such materials will be catalogued and accessioned for curation at the South Carolina Institute of Archaeology and Anthropology, the closest regional repository. The site forms for the identified archaeological sites will be filed with the South Carolina Institute of Archaeology and Anthropology. Field notes from the project have been prepared for curation using archival standards and will be transferred to that agency as soon as the project is complete. Photographic materials are either digital and are not archival – they are being retained by Chicora Foundation.

Should materials be recovered requiring analysis that work will follow professionally accepted standard with a level of intensity suitable to the quantity and quality of the remains.

In general, the temporal, cultural, and typological classifications of prehistoric materials are defined by such authors as Coe (1964), Yohe (1996), Blanton et al. (1986), and Oliver et al. (1986). Historic materials, generally late nineteenth or early twentieth century, are generally classified using such authors as Jones and Sullivan (1980) for glass and Adams (1980), Bartovics (1978), and Price (1979) for ceramics.

Results and Conclusions

Results

No archaeological sites were identified in the transmission corridor as a result of the survey testing or the associated pedestrian survey.

Likewise, no structures are present in the corridor or within the defined APE. The area is entirely agricultural fields, planted pines, or low swampy areas.

As previously explained, the northern portion of the corridor is situated within the Bethea Rural Historic District. This district, resulting from the I-85 South Alternative survey, incorporates two standing structures identified by Trinkley and Southerland (2009), F.L. Bethea House (366-0025) and the A.V. Bethea House (366-0026). An additional three resources (Bethea Tenant House, 366-0037; Bethea Barn, 366-0038; and unidentified resource,366-1492) were subsequently added (Wagoner et al. 2011).

This district contains three farms that were historically owned by the Bethea family and is reported to illustrate the development of agriculture in the area from the 1840s to the present. Wagoner and her colleagues comment that the district, in addition to the three homes, it includes outbuildings, tenant houses, agricultural lands, an African American cemetery, and a country store (Wagoner et al. 2011:51). However, she notes that "the character of the district isbased on its rural nature, and not on its individual buildings" (Wagoner 2011:51).

We do not believe that the proposed corridor will impact this district for two primary reasons. The first is that there is already an existing South Carolina Public Service Authority (i.e., Santee Cooper) corridor parallel to the one proposed. No new alignment is proposed. Moreover, the terminal substation is already present.

The second factor is perhaps even more important and involves the significance of rural electrification to farm in South Carolina. As late as 1934 there was little electricity in South Carolina outside of the major cities. Of the 168,000 farms, only 2% boasted electric power. The Rural Electrification Act (REA) provided low-cost loans for rural electric cooperatives. The formation of rural electric cooperatives began running electricity to locations forsaken by the few large for-profit companies and by 1940, the number of farms with electricity had reached 14.5% (Armstrong et al. 1976:382-383; Edgar 1984, 1998:503-504).

Electric lines such as those existing from Santee Cooper and those proposed by CEPC described in this study, are a central theme in rural South Carolina. A rural district without evidence of electrification would be an anomaly.

Conclusions

This study involved the examination of approximately 5.42 miles of corridor proposed for the use of a transmission line extending from an existing Latta substation in the north and southeast to the existing Dillon substation in the center of Dillon County. This report, conducted for Mr. Tommy Jackson of Central Electric Power Cooperative, provides the results of the investigation and is intended to assist the company comply with their historic preservation responsibilities.

The South Carolina Department of Archives and History GIS was consulted to check

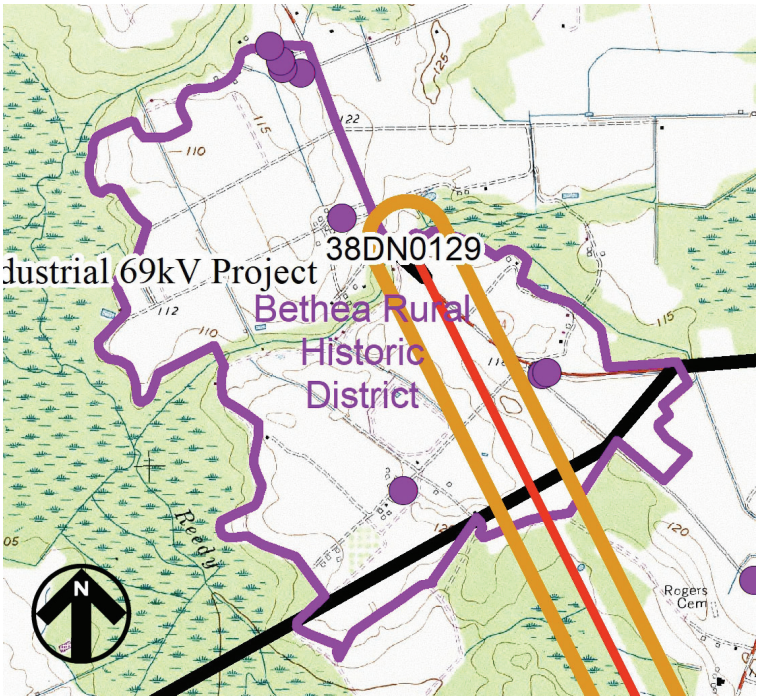


Figure 13. Bethea Rural Historic District. Top is a map showing the limits of district and the proposed corridor (from ArchSite). Lower photograph provides an overview of the district at the existing substation.

for any NRHP buildings, districts, structures, sites, or objects in the study area. None is identified in the survey corridor or in the 50-foot APE around the corridor.

The closest archaeological site is a previously identified archaeological site 38DN0129, a prehistoric site consisting of lithics and ceramics has been determined not eligible. We concur with this determination.

The current field studies (consisting of shovel testing at 100-foot intervals along the 70-foot wide corridor) identified no archaeological sites.

There are no standing structures within the corridor or within the 50-foot APE. Moreover, the area has already been impacted by several large transmission lines substations and their associated towers. The Bethea Rural Historic District will not be impacted by the proposed 69kV transmission line.

It is possible that archaeological remains will be encountered in the area during construction. As always, the utility's contractors should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office, or Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No further land altering activities should take place in the vicinity of these discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

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